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APPLICATION N	D.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,673		09/05/2003	Amos Nussinovitch	85189-5100	2188
28765	7590	03/07/2006		EXAMINER	
		AWN LLP	NAFF, DAVID M		
	1700 K STREET, N.W. WASHINGTON, DC 20006			ART UNIT	PAPER NUMBER
				1651	
				DATE MAILED: 03/07/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)		
-	10/657,673		NUSSINOVITCH ET AL.	
Office Action Summary	Examiner	Art Unit		
	David M. Naff	1651		
The MAILING DATE of this communication appeared for Reply	pears on the cover sheet wi	th the correspondence ac	ddress	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 136(a). In no event, however, may a re will apply and will expire SIX (6) MON' e, cause the application to become AB	CATION.  apply be timely filed  THS from the mailing date of this of the control	,	
Status				
1)⊠ Responsive to communication(s) filed on <u>05 S</u>	September 2003.			
	s action is non-final.			
3) Since this application is in condition for allowa	nce except for formal matte	ers, prosecution as to the	e merits is	
closed in accordance with the practice under the	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.		
Disposition of Claims				
4)⊠ Claim(s) <u>1-40</u> is/are pending in the application	) <b>.</b>			
4a) Of the above claim(s) is/are withdra				
5) Claim(s) is/are allowed.				
6) Claim(s) is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) <u>1-40</u> are subject to restriction and/or	election requirement.			
Application Papers				
9) The specification is objected to by the Examine	er.			
10) The drawing(s) filed on is/are: a) acc	epted or b) objected to t	y the Examiner.		
Applicant may not request that any objection to the	drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correct	tion is required if the drawing(	s) is objected to. See 37 C	FR 1.121(d).	
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached	Office Action or form P	TO-152.	
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. §	119(a)-(d) or (f).		
1. Certified copies of the priority document	ts have been received.			
2. Certified copies of the priority document	ts have been received in Ap	oplication No		
3. Copies of the certified copies of the prio	rity documents have been	received in this National	Stage	
application from the International Burea	u (PCT Rule 17.2(a)).			
* See the attached detailed Office action for a list	of the certified copies not i	received.		
Attachment(s)				
1) Notice of References Cited (PTO-892)		ummary (PTO-413) VMail Date		
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>		)/Mail Date formal Patent Application (PT	O-152)	
Paper No(s)/Mail Date	6)			

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## Election/Restrictions

Claims in the application are 1-40.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-21, drawn to solid cellular hydrocolloid carriers comprising microorganisms entrapped in dried beads having a moisture content of no more than 20%, classified in class 435, subclass 182.
  - II. Claims 22-30, drawn to a method of controlling plant pathogens by applying the beads containing microorganisms to seeds, seedlings or plants of an agricultural crop, classified in class 424, subclass 93.4.
  - III. Claims 31-35, drawn to a method of producing cellular solid carriers comprising dried hydrocolloid beads and entrapped microorganisms, classified in class 435, subclass 174.
  - IV. Claims 36-40, drawn to a method of increasing viability of biological microorganisms by entrapping the microorganisms in dried hydrocolloid beads prior to applying the beads to an agricultural field, classified in class 435, subclass 395.

The inventions are independent or distinct, each from the other because:

Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make

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another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the cellular carriers of invention I can be produced by a method different than required by invention III, such as by producing the beads having pores and allowing a microorganism to be absorbed into the pores from a suspension containing the microorganism.

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the cellular carriers of invention I can be used other than to control plant pathogens as required by invention II, such as can be used for *in vitro* growing of a microorganism to produce a product.

Inventions I and IV are related as product and process of use.

The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the cellular carriers of invention I can be used other than to increase viability of microorganisms as required by invention IV, such

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as can be used for *in vitro* growing of a microorganism to produce a product, and where viability is maintained without being increased.

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The methods of inventions II, III and IV are different methods requiring different steps such that each method can be performed without performing any other method. Beads containing microorganisms used in the method of controlling plant pathogens of invention II and in the method of increasing viability of a microorganism of invention IV can be prepared other than required by the method of invention III for reasons set forth above in regard to the beads of invention I. Cellular carriers resulting from the method of invention III can be used other than to control plant pathogens as in invention II and to increase microorganism viability as in invention IV, such as to grow microorganisms in vitro to produce a product without controlling pathogens and without increasing viability. The method of invention IV does not have to control plant pathogens as required by invention II, and the method of invention II does not have to increase viability as required by invention IV.

Examining inventions I-IV together will be a serious burden due to different searches and considerations in applying prior art required because of different metes and bounds of the claims of the different inventions.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

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In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is 571-272-0920. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-35 0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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